

Stated Meeting, February 21.

Present, twenty-two members.

MR. DU PONCEAU, President, in the Chair.

The following donations were received:—

FOR THE LIBRARY.

- Journal of the Academy of Natural Sciences of Philadelphia. Vol. VIII. P. I. 8vo. Philad. 1839.—*From the Academy of Nat. Sciences.*
- The American Medical Library and Intelligencer, a concentrated Record of Medical Science and Literature. By Robley Dunglison, M. D., Sec. A. P. S., &c. &c. Vol. III. Nos. 21 & 22. Feb. 1 & 15, 1840. Philadelphia.—*From the Editor.*
- The American Journal of the Medical Sciences. No. L. Feb. 1840. Philadelphia. Edited by Dr. Hays.—*From the Editor.*
- Two Letters on the Chinese System of Writing. By the Rev. Charles Gutzlaff, Missionary at Canton, and Peter S. Du Ponceau, LL.D., President of the American Philosophical Society. Extracted from the 7th Vol. (New Series) of the Society's Transactions. 4to. Philadelphia, 1840.—*From Mr. Du Ponceau.*
- A Condensed Geography and History of the Western States, or the Mississippi Valley. By Timothy Flint, Author of Recollections of the Last Ten Years in the Mississippi Valley. 2 vols. 8vo. Cincinnati, 1828.—*From Mr. Vaughan.*
- Democracy in America. By Alexis de Tocqueville, Avocat à la Cour Royale de Paris, &c. &c. Translated by Henry Reeve, Esq. With an Original Preface and Notes. By John C. Spencer, Counsellor at Law. 8vo. New York, 1838.—*From the same.*
- The Speeches of Henry Clay, delivered in the Congress of the United States; to which is prefixed, a Biographical Memoir; with an Appendix, containing his Speeches at Lexington and Lewisburg, and before the Colonization Society at Washington: together with his Address to his Constituents on the Subject of the late Presidential Election: with a Portrait. Philadelphia, 1827.—*From the same.*
- Travels in the Central Portions of the Mississippi Valley: comprising Observations on its Mineral Geography, Internal Resources, and

- Aboriginal Population (performed under the sanction of Government, in the year 1821). By Henry Schoolcraft, U. S. I. A., &c. 8vo. New York, 1825.—*From the same.*
- A Collection of Original Papers relative to the History of the Colony of Massachusetts Bay. By Lieut. Gov. Thomas Hutchinson. Boston, 1769.—*From the same.*
- A Complete Collection of Scottish Proverbs, explained and made intelligible to the English Reader. By James Kelly, M. A. London, 1721.—*From the same.*
- The History of the Province of New York, from the First Discovery to the Year 1832; to which is annexed, a Description of the Country, with a Short Account of the Inhabitants, their Trade, Religious and Political State, and the Constitution of the Courts of Justice in that Colony. By William Smith, A. M. 4to. London, 1757.—*From the same.*
- Tijdschrift voor Natuurlijke Geschiedenis en Physiologie. Uitgiven door J. Van der Hoeven, M. D. Prof. te Leiden, en W. H. de Vriese, M. D. Prof. te Amsterdam. Zesde Deel 1e, 2e en 3e Stuk. Leiden, 1839.—*From the Minister of the Interior of the King of the Netherlands.*

Mr. Lea read a paper entitled, "Description of Nineteen New Species of Colimacea," from his Collection. These were recently received, and chiefly from Mr. W. W. Wood, now of Manilla.

- BULIMUS WOODIANUS.** Testâ ovato-conicâ, crassâ, rufo-fuscâ, imperforatâ; anfractibus quinis, convexis; aperturâ magnâ, ovatâ; labro incrassato, reflexo, margine purpurato; columellâ incrassatâ, lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS BICOLORATUS.** Testâ turrîtâ, supra rufo-fuscâ, subtus viridi, imperforatâ, carinatâ; anfractibus septenis, subconvexis; aperturâ subrotundatâ; labro reflexo, margine subnigro; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS SUBGLOBOSUS.** Testâ globoso-turbinatâ, subtenui, rufo-fuscâ, fasciatâ, imperforatâ; anfractibus quinis, ventricosis; aperturâ subrotundatâ; labro subreflexo, margine tenebroso; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS GRACILIS.** Testâ ovato-conicâ, tenui, imperforatâ; anfractibus senis; subconvexis; aperturâ parvâ, subrotundatâ; labro subreflexo, acuto; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*

- BULIMUS CARINATUS.** Testâ acuminato-conicâ, subtenui, rufo-fuscâ, imperforatâ, carinatâ; anfractibus septenis, subplanulatis; aperturâ ovatâ; labro reflexo, margine tenebroso; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS VIRIDO-STRIATUS.** Testâ turbinato-conicâ, subcrassâ, viridi, albo fasciatâ, nitidâ, imperforatâ; anfractibus quinis, ventricosis; aperturâ subrotundâ; labro reflexo, margine albo; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS VIRGINEUS.** Testâ ovato-conicâ, albidâ, tenui, tenuissimè striatâ, imperforatâ; anfractibus quinis, convexis; aperturâ ovatâ; labro simplici; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- BULIMUS LIBERIANUS.** Testâ elevatâ, lacteâ, pellucidâ, nitidâ, minutè striatâ, perforatâ; anfractibus senis; aperturâ longulâ; labro incrassato, reflexo; columellâ lævi. Habitat. Liberia, Africa.—*Dr. Blanding.*
- CYCLOSTOMA WOODIANA.** Testâ orbiculatâ, subdepressâ, rufâ, albo maculatâ et cinctâ, striatâ, latè et profundè umbilicatâ; anfractibus quinis; apice acuminato; labro incrassato, reflexo, albo. Habitat. Philippine Islands.—*W. W. Wood.*
- CAROCOLLA BIFASCIATA.** Testâ orbiculari, suprâ convexâ, subtus sub-planulatâ, luteo-albâ, nitidâ, minutissimè longitudinaliter striatâ, viridi-bifasciatâ; anfractibus quaternis; labro acuto, reflexo. Habitat. Philippine Islands.—*W. W. Wood.*
- HELIX CEPOIDES.** Testâ globosâ, conico turbinatâ, subtenui, longitudinaliter striatâ, suprâ rufo-fuscâ, subtus luteo-fuscâ, infrâ periphæriam fasciatâ, ad basim uniplicatâ, imperforatâ; anfractibus septenis, inflatis; aperturâ lunatâ; labro irregulariter reflexo, acuto, marginè rufo; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- HELIX BLAINVILLIANA.** Testâ obtuso-convexâ, supernè granulatâ, infernè lævi, infra periphæriam unifasciatâ, minutè perforatâ; anfractibus senis, convexis; aperturâ parvâ, transversâ; labro acuto; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*
- HELIX LAMARCKIANA.** Testâ orbiculato-convexâ, subcarinatâ, rufo-fuscâ, subtenui, irregulariter striatâ, minutè perforatâ; anfractibus quaternis, supernè planulatis; aperturâ magnâ, transversâ; labro acuto; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*

HELIX LUTEO-FASCIATA. Testâ orbiculato-conoideâ, supernè minutè cancellatâ, infèrnè lævi, tenebroso-castaneâ, luteo-uni vittatâ, minutè perforatâ; anfractibus senis, convexis; aperturâ parvâ, transversâ; labro acuto; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*

HELIX FERRUGINEA. Testâ globoso-conoideâ, ferrugineâ, transversim striatâ, solidâ, ventricosâ interdum vittatâ, imperforatâ; anfractibus quaternis, convexis; aperturâ magnâ, obliquâ; labro incrassato, reflexo; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*

HELIX CUVIERIANA. Testâ orbiculato-convexâ, carinatâ, tenui, longitudinaliter minutè striatâ, infra periphæriam tenebrosâ, supernè pallidâ; minutè perforatâ; anfractibus quinis, subplanulatis, suprâ suturis impressis; aperturâ parvâ, transversâ; labro acuto; columellâ lævi. Habitat. Philippine Islands.—*W. W. Wood.*

HELIX BLANDINGIANA. Testâ subglobosâ, corneâ, longitudinaliter striatâ, imperforatâ, obliquè depressâ; anfractibus senis; aperturâ obliquè rotundatâ; labro incrassato, reflexo; columellâ lævi. Habitat. Banks of the River St. Paul, Liberia, Africa.—*Dr. Blanding.*

HELIX HUMPHREYSIANA. Testâ orbiculato-conoideâ, subtus convexâ, minutè rugosâ albido-fulvâ, ad periphæriam fasciatâ, latè umbilicatâ, profundè perforatâ; anfractibus senis, convexis; aperturâ submagnâ, obliquâ; labro acuto; columellâ lævi. Habitat. Specimens received of Mr. Humpheys were marked Pondicherry. Subsequently I received it from Mr. Balastier, of Singapore.

HELIX BALASTERIANA. Testâ orbiculato-conoideâ, sinistrorsâ, subcarinatâ, subtenui, castaneâ, infèrnè inflatâ, propè periphæriam tenebrosiori, minutè rugoso-striatâ, perforatâ; anfractibus senis convexis; aperturâ parvâ; labro incrassato, subreflexo; columellâ lævi. Habitat. Philippine Islands.—*Mr. Balastier.*

Dr. Hare described a mode of procuring silicon by an easy process.

In the year 1833, Dr. Hare had published an engraving and description of an apparatus for evolving silicon or boron from their gaseous fluorides. In operating with the apparatus alluded to, a wire rendered incandescent by a calorimotor was made to ignite potassium while surrounded by fluosilicic or fluoboric acid gas. Consequently the potassium and fluorine entered in combination with pheno-

mena of combustion, while the silicon was deposited or left in combination with potassium and its fluoride.

Lately he had resorted with success to a much simpler process, by which the evolution of silicon or boron might be made easy to any person possessing a sufficiently large mercurial reservoir.

A bell glass, over mercury, was filled with fluo-silicic acid, and by means of a bent wire, a cage of wire gauze, containing a suitable quantity of potassium, was introduced through the mercury into the cavity of the bell, and supported in a position nearly in the centre of it. A knob of iron was made at the end of the rod, so recurved as to reach the cage with ease. The knob, having been heated nearly white hot, was passed through the mercury, so as to touch the cage, and cause the combustion of the potassium and evolution of the silicon. Of this, much remains attached to the cage, in combination with the fluoride of potassium, from which the silicon may be separated by washing in cold water and digestion in nitric acid.

Dr. Hare exhibited a specimen of the silicon obtained by the means above described, weighing seventeen grains.

Dr. Hare made some observations on certain products from the formation of hyponitrous or nitric ether, and its decomposition by various agents, one of which he exhibited to the Society.

This was an extremely acrid liquid, obtained from the last ethereal products of the distillation of hyponitrite of soda, with equivalent measures of alcohol, sulphuric acid and water. The products thus procured, being agitated with green sulphate of iron, until no further portion was absorbed, the aggregate was washed with hydric ether. The resulting ethereal solution, being separated by a funnel and the finger, was subjected to the air in an open vessel. The hydric ether soon evaporating, the residue was the acrid liquid in question, which might be inferred to be a peculiar ether. Its boiling point did not appear to be inferior to that of water. It was soluble in ether and alcohol, but insoluble in water. Caustic potash appeared to cause its decomposition.

As Dr. Hare had elsewhere stated, the effects of this liquid upon the organs of taste and smell, resembled those of mustard or horseradish: upon the eyes its influence was equally distressing. Dr. Hare believed this acrid principle might always be generated at the close of the process for obtaining sweet spirits of nitre by distilling

alcohol from sulphuric acid and nitrate of potassa,* if the process were continued beyond certain limits.

Mr. Lea exhibited a specimen of photographic representation of a plant which had been coloured, together with the original plant, and made some remarks on the useful purposes to which this art might be applied in facilitating the objects of the botanist, &c.

Dr. Patterson, from the committee appointed to correspond with the Secretary of War relative to a system of magnetic and meteorological observations, reported that the subject had been referred to a select committee of Congress, in consequence of the representations of the Secretary.

Mr. S. C. Walker communicated an extract from a letter received from Mr. Edmund Blunt, detailing his observations of the Solar Eclipses of May 14th, 1836, and September 18th, 1838.

These were made at his private Observatory, Brooklyn, New York. Latitude $40^{\circ} 42' 0''$. Longitude 4h. 56m. 0s., nearly, west of Greenwich, being 4.36s. east of the City Hall, New York. They are given in mean time of the place of observation.

		h.	m.	s.	
Begin. Solar Eclipse,	May 14th, 1836,	19	10	1.30	E. Blunt.
End	„ „	21	40	31.20	„
Begin. „	Sept. 18th, 1838,	3	17	18.80	„
Formation of Ring	„	4	36	47.30	„
End of Eclipse	„	5	48	23.63	„
„	„	5	48	17.63	T. I. Page.

Mr. Blunt used a five feet Dollond's achromatic belonging to the coast survey. Mr. Page saw the end of the eclipse of 1836 with another telescope, within half a second of the time stated by Mr. Blunt. In the eclipse of 1838, the time noted for the formation of the ring was when the cusps were separated only by a few dark intervening spaces. Of these, Mr. Blunt counted six in number. The instant of rupture of the ring was not noted. Mr. Blunt thinks that the luminous

* One of the members of the Society, J. Price Wetherill, Esq. whose knowledge and skill, as a manufacturing chemist, are well known, informed Dr. Hare that in the manufacture of sweet spirits of nitro upon a large scale, he had always been careful not to have the process continued after the products began to show a certain degree of acidity.

points connecting the cusps, continued twelve or fifteen seconds. Mr. Blunt did not see the dark lines described by Francis Bailey, Esq. though favourably circumstanced for such an observation. Mr. Walker had found for the longitude of Mr. Blunt's observatory, from the beginning of the eclipse of 1836, 4h. 55m. 52.95s. and 4h. 56m. 2.07s. from the end:—Mean result, 4h. 55m. 57.51s. Mr. E. O. Kendall had found from the eclipse of 1838, a mean result of 4h. 56m. 1.16s. The mean, by the two eclipses, was 4h. 55m. 59.34s.; which makes the longitude of the City Hall, New York, 4h. 56m. 3.7s. Mr. Paine, in the American Almanac, makes the same 4h. 56m. 4.5s.; and Mr. E. I. Dent, by transportation of four chronometers from the Greenwich Observatory to New York, and again to Greenwich, finds for the same 4h. 56m. 4.42s. The mean of the three determinations is 4h. 56m. 4.2s.